

Product Name: Cdc42 Protein

Synonyms: Cell division cycle 42, G25K, CDC42Hs

Catalogue Number: 10107

Source: Human, recombinant full length, His₆-tag

Expression Host: E. coli

Molecular Weight: 21 kDa

Purity: >95% by SDS-PAGE

Introduction: Small GTPases are a super-family of cellular signaling regulators. Cdc42 belongs to the Rho sub-family of GTPases that regulate cell motility, cell division, and gene transcription. GTP binding increases the activity of Cdc42, and the hydrolysis of GTP to GDP renders it inactive. GTP hydrolysis is aided by GTPase activating proteins (GAPs), while exchange of GDP for GTP is facilitated by guanine nucleotide exchange factors (GEFs).

Amino Acid Sequence (1-191)

MQTIKCVVVGDAVGKTCLLISYTTNKFPSEYVPTVFD
NYAVTVMIGGEPYTLGLFDTAGQEDYDRLRPLSYPQTD
VFLVCFSVVSPSSFENVKEKWVPEITHHC PKTPFLLVG
TQIDLRDDPSTIEKLAKNKQKPI TPETA EKLARDLKAV
KYVECSALTQKGLKNVFDEAILLALEPPEPKKSRRCVL
L

Properties

Physical Appearance (form): Lyophilized Powder
from 20 mM Tris-HCl, pH 7.4, containing 100 mM
NaCl.

Physical Appearance (color): White

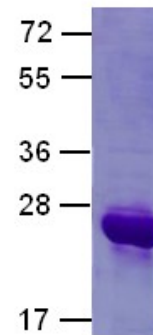
Solubility (Color): colorless

Solubility (Turbidity): clear, 10 mg/mL H₂O

Storage: -80°C

Preparation Instructions

Centrifuge the vial before open the cap and reconstitute in water. Adding of 10 mM β-mercaptoethanol or 1 mM DTT into the solution to protect the protein is recommended and using of non-ionic detergents such as n-Dodecyl β-D-maltoside (DoDM) or polyethylene detergents (e.g. C₁₂E₁₀) also help to stabilize the protein. Avoid repeated freezing and thawing after reconstitution.



References

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7. Shen, Y. et al., Dev. Cell 14: 342-353, 2008.
8. Wu, W. J. et al., Nature 405: 800-804, 2000.
9. Wu, X. et al., Genes Dev. 20: 571-585, 2006.
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